



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/582,603

09/10/2007

Kevin Kulbaba

CH-8454/PS-1152

2179

7590

12/17/2008

Jennifer R. Seng
Lanxess Corporation
Law & Intellectual Property Department
111 RIDC Park West Drive
Pittsburgh, PA 15275-1112

EXAMINER

USELDING, JOHN E

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

12/17/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,603	Applicant(s) KULBABA ET AL.	
	Examiner JOHN USELDING	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 4-7, 9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>6/9/2006, 12/11/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Objections

Claims 4-7, 9, and 10 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot be dependent upon another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Interpretations

Claim 8 recites a "method of improving the wet traction of a tire tread" and recites only a mixing step and vulcanizing. As such, the mixing of the components and vulcanizing is deemed sufficient to produce the effect of "improving the wet traction of a tire tread," especially since there are no other recited requirements as to steps that must be practiced or constituents that are necessary to produce such effect.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuchs (2002/0132892)

Art Unit: 1796

Fuchs teaches a composition preferably comprising hydrogenated carboxylated nitrile rubber (0022 and 0106). Fuchs also teaches that their composition can comprise butyl rubber (0087). Fuchs teaches adding fillers (0017, 36, 40, 41, 55, and 95). Fuchs teaches using vulcanization agents (0037, 0062). Fuchs also teaches mixing all the components and vulcanizing (0059, 0062, 0096-0098).

Claims 1-3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukai et al. (6,037,418) in view of Fuchs (2002/0132892).

The reference to Mukai et al shows the blend of a carboxylated nitrile rubber with a halogenated butyl rubber. Note column 2 (lines 26-36) for the blending of the elastomeric components. Note column 3 (line 39) to column 4 (line 28) for the teaching that the first elastomer may embrace either a brominated butyl rubber (claims 1,3, 7, 8, 10 and 12), or a carboxylated nitrile rubber. The second elastomer may embrace the other constituent recited herein. Vulcanizing agents are shown at column 5 (lines 21-40) and column 7 (lines 57 et seq.) which may be admixed together, as recited in claims 5, 7 and 10. A filler may be added at column 8 (lines 10-16), as recited in claim 6. The shaped article of claims 8 and 9 are shown to include a tire tread at column 8 (lines 31-36).

Fuchs teaches that hydrogenated carboxylated nitrile rubber can be mixed with carboxylated nitrile rubber (0023) or used as a replacement for carboxylated nitrile rubber to provide improved mechanical properties (0106). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have either mixed hydrogenated carboxylated nitrile rubber with the composition of Mukai et al. or replace

Art Unit: 1796

the carboxylated nitrile rubber of Mukai et al. with the hydrogenated carboxylated nitrile rubber to improve the mechanical properties of the composition.

Claims 1-3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (4,626,568) in view of Fuchs (2002/0132892)

The reference to Sato et al shows the blend of a carboxylated nitrile rubber with a halogenated butyl rubber, as claimed. Note column 4 (lines 23-30) for the blending of the elastomeric components, which include for the teaching that the first elastomer may embrace a brominated butyl rubber with a carboxylated nitrile rubber, as recited in claims 1, 3 and 12. Vulcanization agents are shown in the patented claims, as recited in claim 5. A filler may be added at column 2 (lines 42-44), as recited in claim 6. The shaped article of claim 8 is shown at the Abstract. The mixing of the components is shown at the Examples, as recited in claims 7 and 10.

Fuchs teaches that hydrogenated carboxylated nitrile rubber can be mixed with carboxylated nitrile rubber (0023) or used as a replacement for carboxylated nitrile rubber to provide improved mechanical properties (0106). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have either mixed hydrogenated carboxylated nitrile rubber with the composition of Mukai et al. or replace the carboxylated nitrile rubber of Mukai et al. with the hydrogenated carboxylated nitrile rubber to improve the mechanical properties of the composition.

Contact Information

Art Unit: 1796

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN USELDING whose telephone number is (571)270-5463. The examiner can normally be reached on Monday-Thursday 6:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John Uselding
Examiner
Art Unit 1796

/Marc S. Zimmer/
Primary Examiner, Art Unit 1796